

ABSTRACT

The present invention provides a system for increasing the production of indole and quinoline alkaloids, particularly camptothecins and related compounds, in plants, based upon management of plant hormones. This invention includes a system and a
5 method for accelerating the growth of young tissues, inducing the production of camptothecins-bearing glandular trichomes, maximizing the harvest of glandular trichomes, and preserving and treating the glandular trichomes for maximum camptothecins yield. The present invention is useful for any plant matters containing alkaloids, regardless of the plant matters' genetic origin, natural or cultivated variety, and
10 natural or cultivated growing conditions.